

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method for synchronizing symbols at an output of a blind equalizer, the method comprising the steps of:
 - on sending, inserting into a succession of sent symbols, one or more known synchronization sequences of symbols repeated at regular intervals in said succession of symbols;
 - detecting said one or more known synchronization sequences in a succession of symbols at the output of said blind equalizer;
 - deducing any shifting of the symbols in the succession of symbols at the output of the blind equalizer from the result of said detection; and
 - retiming the symbols at the output of the blind equalizer, as a function of the deduced shift of the symbols, by eliminating symbols from or adding symbols to the succession of symbols at the output of the blind equalizer, between a synchronization sequence for which a shift is deduced and a preceding synchronization sequence, the number of symbols added or eliminated corresponding to the deduced shift of the symbols.
2. (Previously Presented) The method according to claim 1, wherein to detect a known synchronization sequence inserted, on sending, into a succession of symbols, the symbols at the output of the equalizer are correlated with said synchronization sequence, and the resulting correlation peaks are detected.

3. (Previously Presented) The method according to claim 2, wherein the detected correlation peaks are compared to a given threshold and the symbols are not retimed unless a peak higher than said threshold is detected.

4. (Previously Presented) The method according to claim 2, wherein the result of said correlation is used to determine information on the phase of the signal carrier that carries the received symbols and that information is used to resolve ambiguity as to the phase of the symbols at the output of the equalizer.

5. (Canceled).

6. (Previously Presented) The method according to claim 1, wherein symbols are eliminated just after the synchronization sequence preceding the synchronization sequence for which a shift is detected.

7. (Previously Presented) The method according to claim 1, wherein the blind equalizer has a switchable structure, uses a switchable algorithm, and, in a convergence mode of operation, includes in cascade a purely recursive whitening filter and a matched transversal filter that is reinitialized as a function of the performance of the equalizer.

8. (Previously Presented) A digital communications receiver, comprising:
a blind equalizer;

means for detecting, at an output from said blind equalizer, a known synchronization sequence inserted into a succession of received symbols;

means for deducing from the result of said detection any shifting of the symbols at the output of the blind equalizer; and

means for retiming the symbols at the output of the blind equalizer, as a function of the deduced shift of the symbols, by eliminating symbols from or adding symbols to the succession of symbols at the output of the blind equalizer, between a synchronization sequence for which a shift is deduced and a preceding synchronization sequence, the number of symbols added or eliminated corresponding to the deduced shift of the symbols.

9. (Canceled).

10. (Canceled).